

TABLE 1.—Continued.
Chromosome Numbers in the *Euchamaelaucinae*.

Genus and Species.	Acc. Number. ¹	State. ²	Localities.	Chromosome Numbers.		Reference.
				n.	2n.	
<i>Verticordia acerosa</i> Lindl.	50/46.	W.A.	Lesmurdie.	8	—	Text-figs. 26, 27.
<i>V. oxylepis</i> Turcz. ⁷ ..	50/86.	W.A.	Nedlands.	8	—	Text-figs. 28, 29.
<i>V. kuegelii</i> Endl.	50/.	W.A.	Lesmurdie.	8	—	Text-figs. 30, 31.
<i>V. insignis</i> Endl.	50/52.	W.A.	Coorow.	9	—	Text-figs. 32, 33.
<i>V. habrantha</i> Schau. ..	52/51.	W.A.	Chester Pass.	18	—	Text-figs. 34, 35.
<i>V. roei</i> Endl.	52/56.	W.A.	Busselton.	9	—	
<i>V. monadelphæ</i> Turcz. ..	S.A.52/101b.	W.A.	Blackwood, S.A. ³	c. 18	—	
<i>Verticordia</i> , Sect. <i>Catocalyptra</i> .						
<i>V. picta</i> Endl.	50/53, 50/59.	W.A.	Coorow.	11	—	Text-fig. 36.
<i>V. drummondii</i> Schau. ..	52/.	W.A.	Morowa.	11	—	
<i>V. pennigera</i> Endl.	S.A.52/.	W.A.	Blackwood, S.A. ³	11	—	
<i>V. grandis</i> Drummond ..	50/122.	W.A.	Watheroo.	22	—	Text-figs. 37, 38.
<i>Pileanthus peduncularis</i> Endl.	—	W.A.	Coorow.	11	—	Text-figs. 39, 40.
<i>Chamaelaucium uncinatum</i> Schau.	—	W.A.	Sydney, cult.	11	—	S.-W. 1950.
<i>Ch. drummondii</i> Meissn ...	—	W.A.	Coorow.	11	—	
<i>Ch. axillare</i> F. Muehl. ..	S.A.52/112.	W.A.	Blackwood, S.A. ³	11	—	Text-fig. 41.

¹ Reference to Herbarium sheets, Botany Dept. Herbarium.

² State to which species are native.

³ Transplants from nature, grown in Miss E. Ashby's garden, Blackwood, S.A.

⁴ An undescribed species. The name used is from an unpublished manuscript by the late Mr. Blakely.

⁵ Transplants from nature, grown by Mr. G. Altofer, of Wellington, N.S.W.

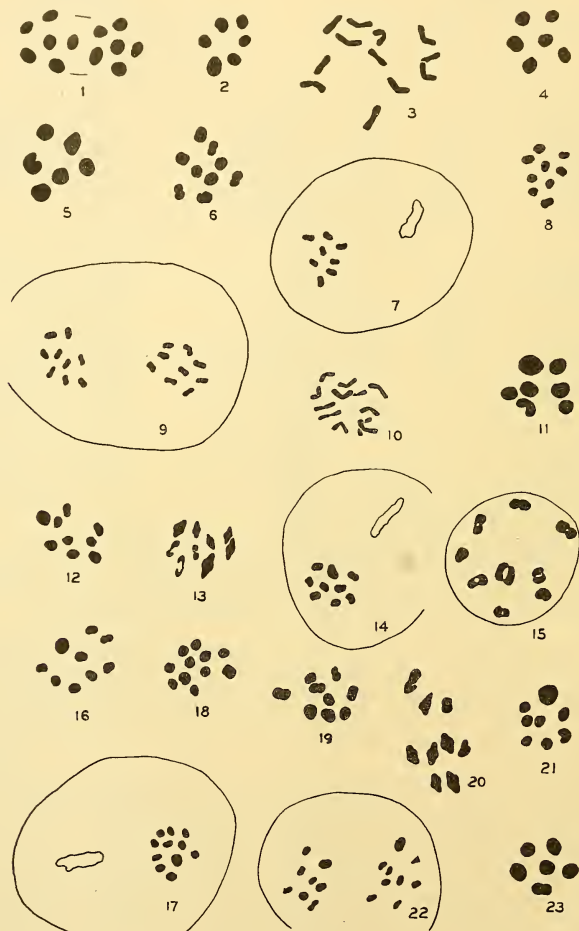
⁶ Plants growing in the gardens of the University of Western Australia. The material supplied by Miss Baird in 1949, and mentioned in Smith-White (1950), was probably taken from these plants.

The genus *Darwinia* was divided into two sections by Bentham (1866). In the section *Genetyllis*, haploid 6 is the usual chromosome number, but two species, *D. vestita* and *D. pauciflora*, which are morphologically allied, are each haploid 9, a number characteristic of the small eastern genus *Homoranthus*. The section *Schaumannia* is represented only by the South Australian *D. micropetala*, which is unique in having a haploid number 7.

In the genus *Homoranthus*, *H. flavescens* was considered by Bentham to be identical with *H. virgatus*. *H. darwinioides* was given generic status under the name *Rylstonea* by Baker (1898), and both Baker and Maiden and Betche (1898) believed that it was closely related to *Verticordia*. All species are haploid 9.

Verticordia was also divided into two sections by Bentham—*Euvorticordia* and *Catocalyptra*. In the former, gametic numbers of 6, 8 and 11, and ploidy on base 8 and base 9 are reported, but the occurrence of these numbers does not conform to the taxonomic arrangements given either in Bentham's *Flora Australiensis* or in the unpublished Blackall flora of Western Australia. The confusion in the previous report of the chromosome number of *V. plumosa* (Smith-White, 1950) has been resolved. The material forwarded by Miss Baird in 1949, which gave a count of $n = 8$, was probably taken from the plant 50/86, growing in the gardens of the University of Western Australia. This plant has been identified by Mr. C. A. Gardner, Government Botanist in Western Australia, as *V. oxylepis*. The cultivated material forwarded by Miss Eardley, of the University of Adelaide, was grown by Miss Ashby at Blackwood, and is similar to material of *V. plumosa* collected at Albany.

In *Verticordia* Section *Catocalyptra*, the gametic number is 11, and *V. grandis* is tetraploid, $n = 22$. Eleven is also the base number for the smaller genera *Pileanthus* and *Chamelaucium*.



Text-figures 1-23.

1, *Darwinia hypericifolia*, 1-A. 2, *D. speciosa*, 1-M. 3, *D. speciosa*, somatic metaphase. 4, *D. collina*, 1-M. 5, *D. "mesembryanthemoides"*, 1-M. 6, *D. vestita*, 1-M. 7, *D. vestita*, 2-M. 8, *D. pauciflora*, 1-M. 9, *D. pauciflora*, 2-M. 10, *Darwinia* sp. 52/7. 11, *D. micropetala*, 1-M. 12, *Homoranthus virgatus*, 1-M. 13, *H. virgatus*, 1-A, side view. 14, *H. virgatus*, 2-M. 15, *H. darwinioides*, diakinesis. 16, *H. darwinioides*, 1-M. 17, *Verticordia plumosa*, 2-M. 18, *Verticordia* sp. 50/87, 1-M. 19, *V. brownii*, 1-M. 20, *V. brownii*, 1-M, side view. 21, *V. nitens*, 1-M. The large bivalent is particularly conspicuous. 22, *V. nitens*, 2-M. 23, *V. grandiflora*. (All figures $\times 2000$.)